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91-1927

No. _____

Supreme Court, U.S.
FILED
JUN 2 1992
OFFICE OF THE CLERK

IN THE

**SUPREME COURT OF THE UNITED STATES**

OCTOBER TERM, 1991

TEXAS WATER CONSERVATION ASSOCIATION,
Petitioner
and
SABINE RIVER AUTHORITY

v.

U.S. DEPARTMENT OF INTERIOR, ET AL.
and
THE SIERRA CLUB AND THE NATIONAL AUDUBON SOCIETY, Respondents.

**Petition for Writ of Certiorari to the United States Court of Appeals for the Fifth Circuit**

**PETITION FOR A WRIT OF CERTIORARI**

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**APPENDIX D**

**AFFIDAVITS, SELECTED INTERROGATORY EXCERPTS AND LETTERS**

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**APPENDIX D**

**UNITED STATES DISTRICT COURT**
**FOR THE EASTERN DISTRICT OF TEXAS**
**TEXARKANA DIVISION**

| | |
|---|---|
| **SABINE RIVER AUTHORITY** | **§** |
| **Plaintiff,** | **§** |
| | **§** |
| **v.** | **§** |
| | **§** |
| **UNITED STATES DEPARTMENT OF INTERIOR, ET AL.** | **§** |
| **Defendants.** | **§** |

**AFFIDAVIT OF ROBERT S. GOOCH, P.E.**

I declare the following to be true to the best of my knowledge:

1. My name is Robert S. Gooch. The information describing my employment, my experience and training in water supply planning and design remains as described in paragraph 1 of my affidavit dated June 9, 1988, and filed on June 16, 1988, as Exhibit B with the Memorandum of Points and Authorities of Plaintiff Sabine River Authority in Support of Motion for Partial Summary Judgment ("First Affidavit"). That

discussion may be supplemented further by noting that my work in water planning has involved working closely with Texas state agencies. I have also worked on the analysis and planning of mitigation for the environmental impacts of reservoir development, as required for Federal and state permits. This affidavit affirms, supplements and incorporates the contents of the First Affidavit and its attached Upper Sabine Basin Regional Water Supply Plan ("Regional Plan"), and will repeat matters contained therein only as necessary to address points raised in the briefs of the Fish and Wildlife Service ("FWS") and/or the Sierra Club.

ENVIRONMENTAL REVIEW OF TEXAS WATER PROJECTS, INCLUDING WATERS BLUFF

2. The Waters Bluff project, like all water supply reservoirs in Texas, must be

permitted by a state agency, the Texas Water Commission ("TWC"), and by a federal agency, the Corps of Engineers ("Corps"). In their permitting efforts, the Water Commission and the Corps of Engineers coordinate with and consider input from the Fish and Wildlife Service.

3. This permitting process typically requires substantial analysis of environmental impacts. Appropriate mitigation is then included as a condition for the issuance of the permits. In developing any major water supply reservoir, an applicant must submit its plans to an environmental review, with an environmental impact statement ("EIS") as the key instrument of evaluation. Through this process, Waters Bluff Reservoir would be subject to all environmental constraints

on reservoir development currently in the laws of Texas and the United States.

4. There are well established procedures for judging the environmental acceptability of proposed reservoirs on a case-by-case basis. There are also well established procedures for mitigating the environmental impacts of specific reservoir projects. The Fish and Wildlife Service has been closely involved in the development of these procedures.

MITIGATION FOR TEXAS WATER PROJECTS

5. The Fish and Wildlife Service has been an active participant in the development of mitigation plans for reservoirs in Texas. As of December of 1986, mitigation had been required for at least three major reservoirs in Texas: Limestone, Richland-Chambers, and Cooper. In each case, the FWS was a participant in

mitigation planning and was or should have been aware of the mitigation requirements.

6. Lake Limestone on the Navasota River was developed by the Brazos River Authority in the late 1970s. Funds set aside for mitigation were later used by the Texas Parks and Wildlife Department ("TPWD") to purchase lands in the Trinity River Basin.(21)

7. Richland-Chambers Reservoir near Corsicana is owned and operated by the Tarrant County Water Control and Improvement District Number 1. After environmental investigations and development of an EIS, the Corps of

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(21) Numbers in parentheses match references listed in Attachment 1 to the First Affidavit and Attachment 1 to this affidavit. Numbers 1 through 20 are from the First Affidavit, and numbers greater than 20 are listed in this affidavit.

Engineers issued a Section 404 permit for the project. The Section 404 Permit required mitigation, including the purchase of 13,400 acres to be managed by TPWD (22,23).

8. Cooper Reservoir is a Corps of Engineers project on the South Sulphur River in East Texas. A comprehensive environmental review of this project, including an EIS, led to development with appropriate mitigation of environmental impacts (24).

9. As of December of 1986, the Fish and Wildlife Service was participating in environmental studies for a number of other reservoir projects, including but not limited to Stacy, Little Cypress, Applewhite, Justiceburg, Big Sandy, Lake Creek and Bedias.

10. Stacy Reservoir, located east of San Angelo, Texas, is sponsored by the Colorado River Municipal Water District. The Corps of Engineers Section 404 permit issued for this project in April of 1987 required the purchase of a 5,990 acre tract or equivalent lands to be managed for the enhancement of wildlife (25). The Corps prepared an EIS prior to issuing the permit.

11. The Little Cypress Reservoir is a proposed project on Little Cypress Creek near Hallsville, Texas, sponsored by the Little Cypress Utility District ("LCUD"). After considering the recommendations of two private consultants, the TPWD, LCUD, TWC staff, FWS and a Hearing Examiner, the Texas Water Commission issued a permit in 1988 requiring a total of 12,000 acres of

mitigation, with 10,000 acres to be bottomland hardwoods (26).

12. The Corps of Engineers has published a Final EIS for Applewhite Reservoir, a proposed project on the Medina River (27). The mitigation proposed in the Final EIS includes acquiring 1,748 acres of land, mostly bottomland hardwoods, and managing the land to benefit wildlife.

13. Planning for mitigation of the Justiceburg Reservoir site is proceeding as part of the Federal 404 permitting process. Big Sandy, Lake Creek and Bedias have not moved to the permitting stage, but the planning and analysis done to date make it clear that none of these sites would be developed without mitigation of environmental impacts.

TEXAS WATER SUPPLY PLANNING AND

THE TEXAS WATER PLAN

14. The first official Texas Water Plan, dated 1968, recommended development of 67 new reservoirs in Texas by the year 2020 (15). This recommendation would require construction of approximately 13 projects per decade. Actual development to meet Texas water needs between the 1968 Plan and the 1984 Plan involved 43 new reservoirs in 16 years, or approximately 27 projects per decade. This is more than twice the rate forecast.

15. A comparison of the 1968 Texas Water Plan with the plan approved in 1984 illustrates the need for flexibility in water planning. Between 1968 and 1984, a number of reservoirs were developed at different locations and different sizes than envisioned in the 1968 plan. Plans

for new reservoirs have been adopted, and plans for some reservoirs have been abandoned due to changing conditions.

16. In its effort to promote planning and orderly development of water resources in Texas, the Texas Water Development Board ("TWDB") recognizes the need for detailed local planning to supplement statewide efforts. Since the adoption of the 1984 Water Plan, the TWDB has encouraged local planning like that carried out in the upper Sabine Basin by the Sabine River Authority. The TWDB recognizes that such planning is necessary for intelligent development of the state's water resources and is not in conflict with its own efforts. In a number of cases, the TWDB has provided financial assistance for local planning.

17. The 1984 Texas Water Plan attempts to project how water demand and supply

might be balanced in the year 2030. These projections show a small surplus for the upper Sabine Basin, based on the assumption that additional sources of water supply will be developed as necessary to supply the area's growing needs.

18. The 1984 Water Plan does not discuss the use of water from Toledo Bend Reservoir to supply the entire upper Sabine Basin. The Plan notes that use of Toledo Bend water in the Marshall area "is proposed" and states that additional studies will be needed "to examine the engineering alternatives and the economic, environmental and institutional considerations that would be involved. . . ." (Page III-5-11). Studies of engineering alternatives and economic considerations have been performed by the Bureau of Reclamation ("BOR") (5) and by

URS Engineers (for the Sabin River Authority) (4). These studies concluded that delivery of water from Toledo Bend Reservoir to the upper Sabine Basin is more costly than other alternatives and is "nonviable" (5). No study has been performed by FWS or any other group on the environmental feasibility of deliveries from Toledo Bend.

THE UPDATE OF THE MASTER PLAN

19. The Update of the Master Plan for the Sabine River and Tributaries in Texas ("Master Plan") adopts projections from the Texas Water Plan which show the need for additional water to meet the growing demands in the upper Sabine Basin. The Master Plan shows a need for 463,950 acre-feet per year of water in the upper Sabine Basin as of 2030 ((10), Page 2-32). The 1984 Texas Water Plan shows a need for

463,900 acre-feet per year of water in the upper Sabine Basin as of 2030 ((12), Page III-5-8). (The difference of 50 acre-feet per year is due to rounding.) The projected need for 463,950 acre-feet per year in the upper Sabine Basin does not include commitments for export from the basin in either case. The Federal Defendants' Memorandum dated December 14, 1988, (28) seems to reflect the mistaken impression that the projections of water use in the upper Sabine Basin in the Master Plan are not consistent with those in the 1984 Water Plan. In fact they are the same.

20. The Master Plan identified Waters Bluff and Big Sandy as the recommended projects to supply the upper Sabine Basin through 2030. The Master Plan lists other sites for the purpose of indicating that

they have been identified as possible reservoir sites, but the Plan does not show those potential sites to be feasible.

UPPER SABINE WATER SUPPLY PLAN AND FIRST AFFIDAVIT

21. As stated on the first page of the Regional Plan, my company was hired to prepare that plan in July of 1987. The Regional Plan was published in May of 1988, and regional water supply planning based on it is proceeding.

22. I prepared the First Affidavit in June 1988, based on the analysis described in the Regional Plan and on information in 19 references, 15 of which were available to FWS when it prepared its environmental assessment ("EA") (2). The four more recent sources cited in the First Affidavit were the Regional Plan itself, the Feasibility Study for the Belzora Landing

Reservoir (first stage to Waters Bluff), and the transcript and applicant's hearing brief for the Little Cypress Reservoir hearings before the Texas Water Commission. The Regional Plan is based on information available at the time that the EA was prepared, and it shows a need for additional water supply in the upper Sabine Basin.. The Feasibility Study on Belzora Landing does not alter the conclusions of the Waters Bluff Feasibility study, which was available to FWS. It merely provides a more detailed analysis of the feasibility of the development of Belzora Landing as a first stage to Waters Bluff, an idea presented in the Waters Bluff study (6). The transcript and the hearing brief for the Little Cypress Reservoir permit hearings provide information on the impact that Fish and Wildlife Service release

proposals would have on the yield of the proposed Little Cypress Reservoir. Thus, First Affidavit and underlying reports present and clarify information which was available at the time of the EA and of which those involved in Texas water planning would have been aware. Neither the First Affidavit, the Regional Plan, the Master Plan, the Waters Bluff Feasibility Study, nor the Belzora Landing Feasibility Study contradicts the Texas Water Plan. These newer publications are more specifically focused in geographic and water project coverage and are supplementary to and more complete than the Water Plan for the area they cover.

23. The Regional Plan, as discussed in the First Affidavit, shows a need for additional water supply. Its demand analysis includes exports from the Sabine

Basin only to the extent of commitments already under contract. The existing contracts are not contingent on additional water development.

24. The water shortage that would result in the Sabine River Basin if no additional sources of supply are developed before 2030 is shown in Table 1, on Page 3 of the First Affidavit. The table shows a shortage of 208,962 acre-feet per year by 2030 with no new supplies.

25. The Federal Defendants' Brief date December 14, 1988 (28) incorrectly interprets the First Affidavit as supporting the reasonableness of the FWS conclusion that Toledo Bend water is available to meet export needs. The use of Toledo Bend water to meet export needs is not discussed in the First Affidavit. Contracts with Dallas, Commerce and Terrell

specifically allocate water from Lake Tawakoni and Lake Fork Reservoir to those cities. Toledo Bend Reservoir is approximately 150 miles farther away from Dallas, Commerce and Terrell than is Lake Tawakoni. Water from Toledo Bend could not be substituted for those cities' contracted supplies in the nearer lakes.

26. Although the First Affidavit does not discuss the use of water from Toledo Bend Reservoir to satisfy the contracts with Dallas, Commerce and Terrell, it does point out that use of Toledo Bend water in the upper Sabine Basin, which is closer to Toledo Bend, is unreasonable due to excessive cost. The First Affidavit states that a pipeline from Toledo Bend Reservoir to the upper Sabine Basin has been studied twice by qualified engineers and found to be "nonviable" and more costly than any

other alternative studied (4,5). The cost of delivery from Toledo Bend to Dallas, Commerce and Terrell would be even more excessive than the cost of delivery from Toledo Bend to the upper Sabine Basin because of the added distance.

27. The Federal Defendants' Memorandum dated December 14, 1988, (28) incorrectly asserts that the First Affidavit states that Big Sandy Reservoir is not needed. The First Affidavit correctly states that water from Big Sandy would be more expensive than water from Waters Bluff.

Respectfully submitted,

/S/ R. S. Gooch
Robert S. Gooch

Dated: 2/15/89

**STATE OF TEXAS** §
§
**COUNTY OF TARRANT** §

SUBSCRIBED AND SWORN TO BEFORE ME this the 15th day of February, 1989.

/s/ Barbara Grimes
Notary Public in and for the
State of Texas
My Commission Expires: 9/30/92

**ATTACHMENT 1**

**LIST OF REFERENCES**

(21) Personal communication with Pete Pullen of the Brazos River Authority, February 1989.

(22) U. S. Army Corps of Engineers, Fort Worth District: *Richland Creek Reservoir Final Environmental Impact Statement*, Fort Worth, 1982.

(23) U. S. Army Corps of Engineers, Fort Worth District: Section 404 Permit for Richland Creek Reservoir and Record of Decision, Fort Worth, June 1982.

(24) U. S. Army Corps of Engineers, Fort Worth District: *Cooper Lake and Channels, Texas, Final Supplemental Environmental Impact Statement,* Fort Worth, March 1981.

(25) U. S. Army Corps of Engineers, Fort Worth District: Section 404 Permit for Stacy Reservoir and Record of Decision, Fort Worth, April 1987.

(26) Texas Water Commission: Permit 5098 (for Little Cypress Reservoir), Austin, September 1988.

(27) U. S. Army Corps of Engineers, Fort Worth District: *Applewhite Reservoir Final Environmental Impact Statement,* Fort Worth, January 1989.

(28) U. S. Department of the Interior, *et al.*: "Federal Defendants' Memorandum in Opposition to Motions of Plaintiff and Plaintiff-Intervenor for Partial Summary Judgement and in Support of Cross-Motion

for Summary Judgement," Tyler and Washington, December 14, 1988.

**APPENDIX D**

**AFFIDAVIT**

**STATE OF TEXAS §**
**§**
**COUNTY OF TRAVIS §**

BEFORE ME, the undersigned Notary Public, on this day personally appeared Leroy Goodson, who being by me duly sworn on his oath deposed and said that the following statements are true:

"My name is Leroy Goodson and I am over 21 years of age, competent to make this affidavit, and personally acquainted with the facts herein stated.

"I am general manager of the Texas Water Conservation Association. The Texas Water Conservation Association is a statewide organization composed of river authorities, individuals, firms, corporations, cities, water districts, public and private agencies, and groups dedicated to the task of conserving, developing, protecting and

utilizing the water resources of Texas for all beneficial purposes. Other goals of the Association are to preserve, promote and defend state primacy and administration of all laws and regulations involving water rights, quality, and utilization; protect and preserve surface water quality through support of regional watershed management programs; develop, control and manager the water resources of the State at the lowest practicable level of governmental unit, whether local or regional, subject to the State's right of continuing supervision; and maintain the management independence of local and regional water resource management agencies in order to retain direct lines of responsibility and responsiveness between such agencies and the constituencies they serve; implement effective water conservation programs which

meet the many varied circumstances of the diverse State of Texas, such programs to be implemented and managed by local entities where practical and feasible; and protect existing water rights without impeding the orderly development and beneficial utilization of the State's water resources.

"Within the membership of the Texas Water Conservation Association, the following political subdivisions are most directly affected by the Bottomland Hardwood Preservation Program: Brazos River Authority, Little Cypress Utility District, Sabine River Authority, Trinity River Authority, North Texas Municipal Water District, City of Dallas, City of Houston, Tarrant County Water Control and Improvement District Number One, Angelina-Neches River Authority, Red River

Authority, and Upper Neches River Municipal Water Authority.

/S/ Leroy Goodson
AFFIANT

SUBSCRIBED AND SWORN TO BEFORE ME this the 15th day of February, 1989.

/S/ Linda C. Blansitt
Notary Public in and
for the State of Texas

LINDA C. BLANSITT
Typed or Printed Name of
Notary Public

My Commission Expires:
March 3, 1992

APPENDIX D

UNITED STATES DISTRICT COURT
FOR THE
EASTERN DISTRICT OF TEXAS
TEXARKANA DIVISION

SABINE RIVER AUTHORITY
Plaintiff,

Civil Action
TX-87-36-CA

UNITED STATES DEPARTMENT OF INTERIOR, et al.
Defendants.

**AFFIDAVIT OF ALBERT GRAY**

**DEVELOPMENT MANAGER OF SABINE RIVER AUTHORITY**

I declare the following to be true to the best of my knowledge:

I. INTRODUCTION

1. I am Albert Gray, Development Manager for the Sabine River Authority.

2. This affidavit incorporates by reference and restates my affidavit dated June 13, 1988 and filed on June 16, 1988 as Exhibit D to the Memorandum of Points and Authorities of Plaintiff Sabine River

Authority in Support of Motion for Partial Summary Judgment ("First Affidavit").

II. FWS Failure to Consult and Concealment of FWS Plans

3. The Authority had no knowledge of FWS preservation plans for the "Middle Sabine Site", an area in conflict with the Waters Bluff site,-until it received a copy of the Draft EA on September 10, 1986 announcing FWS's plan to acquire the Club site easement. At meetings between the Bureau of Reclamation (BOR), the Authority, and FWS, discussions took place concerning "the Big Sandy site", the "confluence site" and a third site added at the suggestion of the Authority (the "upper Sabine site") as possible mitigation sites for the Big Sandy Reservoir. The "Middle Sabine Site" was never discussed and it was not included in the FWS's Planning Aid Report for the Texas

Big Sandy Project dated September 24, 1985. See map attached hereto identifying the geographical distinction between mitigation sites discussed by FWS and the Middle Sabine site (i.e. the location of the Club property). The Planning Aid Report does establish that FWS utilized the Habitat Evaluation Procedure (HEP) in evaluating mitigation sites for the proposed Big Sandy Reservoir and concluded that the upper Sabine site suggested by the Authority was FWS's preferred alternative.

4. In our meetings, FWS did mention the "Concept Plan" and it is referenced in the Planning Aid Report, but they did not provide that plan to the Authority even though it was requested on three occasions. FWS first provided a copy of the Concept Plan to the Authority when we met with FWS

in Albuquerque on September 30, 1986, after the Draft EA had been released.

5. In October 1985, the Authority requested information from FWS concerning what endangered or threatened species might be affected by Waters Bluff. FWS did not respond with any mention of plans to establish a refuge in the Waters Bluff site.

6. The Concept Plan states that FWS met with governmental agencies regarding the Concept Plan. The Authority was not one of those agencies, even though the Authority is a key water resource agency in the Sabine Basin and implementation of the Concept Plan would have serious impacts on its ability to provide for needed water supplies.

7. FWS's EA discusses written reports obtained from the Authority but FWS never

discussed those reports or other water supply information with the Authority. If FWS had discussed the matter with us, we would have advised them of facts overlooked in the EA, for example, the reports of the infeasibility of transfer of Toledo Bend water for use in the upper Sabine Basin. (URS, prepared for the Authority, dated May, 1983; and BOR dated September, 1986).

8. The Master Plan prepared in March, 1985, at the Authority's direction did not mention that Waters Bluff would conflict with a FWS Priority One site because we were not aware of that fact until receipt of the Draft EA on September 10, 1986.

III. Water Contracting and Permitting Procedures

9. The Texas water rights procedure generally require water to be sold pursuant to contract from a particular project.

Thus, water contracts are usually executed after most planning studies have been completed, normally two years before construction begins. The typical planning horizon, from completion of preliminary feasibility studies and financing arrangements to project completion is ten years. As a consequence, there are no existing contracts (for in-basin or export use) for the sale of water from Waters Bluff. Any future export contracts related to Waters Bluff would be expected to be for municipal uses.

10. All contracts, whether for export or not, are binding. Under these contracts, the sale of water from a project cannot be diverted to other users by the Authority, in-basin or otherwise. A breach of these contracts would entitle a user to seek their enforcement.

11. When water rights permits or permit amendments are needed, these contracts also are subjected to a full-public hearing and comment period in the permitting process. The Texas Water Commission, in evaluating a contract for inter-basin transfers, considers whether there will be sufficient remaining supplies to meet projected in-basin water needs.

IV. The Authority's Responsibility to the Basin and the State

12. The Authority's responsibility is primarily related to providing for water supplies within the Sabine Basin. However, the Authority also has a duty to those outside the Sabine Basin. Even though river authorities in Texas have water supply management functions in their respective jurisdictional areas, the surface waters in streams are under State

ownership and the State allocates these waters, through the permitting process, for the use and benefit of all the people of Texas.

V. Authority Plays Active Role in Water Quality Management and Environmental Enhancement

13. The Authority has taken an active role in water quality management and environmental enhancement activities since its initial operational activities began in 1954, and over the years has expanded this service to meet increasing needs throughout the Sabine River Basin. This commitment is demonstrated by the Authority's expenditure of over $1.3 million from September 1, 1983 to August 31, 1986, for water quality monitoring and environmental protection. Also, Toledo Bend Reservoir has a non-federal wildlife management area made

possible through a cooperative arrangement between the Authority, the Texas Parks and Wildlife Department and Ducks Unlimited.

VI. The Authority's Role as a State Agency

14. The Authority was created by the State Legislature in 1949 as an official agency of the State of Texas. The Authority operates within its Statute of Creation and is governed by a nine-member Board of Directors appointed by the Governor of Texas. This Board of Directors establishes equitable rates for the sale of water and other services of the Authority. The Authority does not earn a profit. Rather, its revenues are utilized to provide for operation and maintenance of its facilities and to provide for other necessary services, including water quality and environmental protection.

VII. Waters Bluff

15. Waters Bluff is not a speculative project. The reservoir proposal evolved out of standard Authority planning procedures before the Authority became aware of FWS's interest in an area within the reservoir site. By the time the Authority became aware of FWS's interests -- when it received the Draft EA in September 1986 -- the Authority had already performed initial feasibility studies as part of the Update of the Master Plan (March, 1985) and a Waters Bluff Preliminary Feasibility Study (March, 1986) and the Authority's Board of Directors have approved both reports.

16. It is not correct that the Waters Bluff supply is not needed because Big Sandy, Prairie Creek, Carthage and Toledo Bend Reservoirs will be adequate to meet

the water needs of the Sabine River Basin through the year 2030. First, all of these reservoirs given as alternative water sources to Waters Bluff, except Toledo Bend, are as preliminary or more so than Waters Bluff - none are permitted or designed. Any water supply reservoir must go through a planning process, during which studies are made and refined. The Big Sandy Reservoir had conflicted with a Priority One area (the floating glade marsh) and the two water agencies studying that project, the BOR in cooperation with the Sabine River Authority, moved the damsite downstream five miles and downsized the project to avoid the floating glade. As a result, the proposed Big Sandy Reservoir would have a reduced water yield and it is still located in a Priority Two site. The proposed Carthage Reservoir,

like Waters Bluff, would be located in a Priority One site; and the Carthage Reservoir site is underlain with lignite and oil and gas reserves. The Prairie Creek Reservoir would supply less than ten percent of the additional water needed in the upper Sabine Basin by 2030, and is intended only as a local water supply project. Big Sandy and Prairie Creek Reservoirs combined would supply only one-third of the need by 2030. The BOR is now completing studies of the Big Sandy Project and is waiting on the fate of Waters Bluff or Belzora Landing because Big Sandy would cost approximately the same as Belzora Landing but would only yield half as much water. Toledo Bend water for upper Basin use, as previously mentioned, is not viable. Except for possible supply to the City of Marshall, the 1984 Texas Water Plan

does not recommend that Toledo Bend supply water upstream; however the 1984 Water Plan did recommend the possible use of up to 961,700 acre feet per year of Toledo Bend water for transfer out of basin downstream for use in the Houston-Galveston area. FWS was aware of and supports this use of Toledo Bend water according to its January, 1986 Planning Aid Report for the San Jacinto Project. (see copy attached at page 35). Also, use of Toledo Bend water to supply needs upstream has been found infeasible in two different studies (as mentioned in 7 above) with BOR terming the proposal "nonviable".

17. Approximately two-thirds of the Toledo Bend water is no longer available for use in the upper Basin because it is commited through an Option Agreement between the Authority and the San Jacinto

River Authority (SJRA) for their use in the greater Houston area. Negotiations for this Option Agreement began before March, 1986 and were concluded successfully on February 4, 1987. Initial feasibility studies for this water transfer project were completed in December, 1988. This use of Toledo Bend water has been supported by FWS as well as various environmental groups including the Houston Sierra Club and the Houston Audubon Society. As recently as January 1986, FWS recommended that Toledo Bend water be used in the Houston area in their report to BOR stating that the proposed Lake Creek Reservoir in the San Jacinto Basin was unnecessary.

18. The remaining one-third of Toledo Bend water is needed to supply water for use in the lower Sabin Basin. Almost all municipal water needs and some industrial

water needs in the lower Sabine Basin are currently being supplied from groundwater. Our experience has been that these groundwater users are in the process of changing over to surface water use due to salt water intrusion, from heavy groundwater use, and potential surface subsidence.

19. The proposed Carl Estes Reservoir, which is underlain with lignite, is not expected to be built before 2030 because there is no active mining in the reservoir at this time and lignite mines are planned for an active life of at least 25 years. Carl Estes is scheduled to be included in the 1989 Corps of Engineers list of projects to be deauthorized since it has been in an inactive state with no federal expenditure of funds since 1979. This inactive status was well known at the time

FWS prepared its Draft and Final EA. While Carl Estes could theoretically be built after 2030, there is no certainty when or if it would be built because of the same problems already mentioned. Also, if Waters Bluff were built first, it is likely that Carl Estes would never be built due to the attendant large reduction in yield of this project.

20. Without Waters Bluff as a source of water supply, existing surface supplies would be stressed beyond capacity, and there would be additional demand for groundwater. Based on my experience in working with entities in the upper Sabine Basin concerning their water supplies, groundwater supplies in that area are meeting the needs of some individual and small water users but cannot supply any appreciable increase in water needs due to

poor water quality and small quantity production from most wells.

21. All water permitted to the Authority for use in the upper Sabine Basin is committed through long-term water supply contracts. Present needs for additional water are projected to grow to 208,962 acre-feet per year by the year 2030. Water supply contracts would be executed for the Waters Bluff Reservoir within approximately two years of construction of that project.

/s/ Albert J. Gray
Albert J. Gray

STATE OF TEXAS

COUNTY OF ORANGE

Subscribed to and sworn before me by Albert J. Gray on this 15th day of February, 1989.

/s/ Billie Kay Rogers
Notary Public, State of Texas
My Commission Expires: 5-26-89

AFFIDAVIT OF ALBERT J. GRAY

DISCUSSION

SELECTION OF THE LEAST DAMAGING ALTERNATIVE

The mitigation policy of FWS (Federal Register Vol. 46, No. 15, pages 7644-7663) has as a planning goal that, for resource category 2 habitat, there should be no net loss of in-kind habitat value. For resource category 3 habitat there should be no net loss of total habitat value while minimizing losses to in-kind habitat values. For water supply projects, this is accomplished first by selection of the least damaging alternative and then by compensation for unavoidable losses.

The FWS provided BR with the first planning-aid report on March 30, 1984. That report recognized that there would be significant losses to Resources Category 2 wildlife habitat with any reservoir. The

report recommended that, in consideration of these losses, planning consider foremost the use of alternate sources of water to meet projected needs.

One of the preliminary findings by BR (1984) on this project was that, even by developing reservoirs at both lower Lake Creek and Cleveland (a combined yield of 118,000 acre-ft/yr), the in-basin water supply would not meet a 2030 deficit of 747,000 acre-ft/yr and out-of-basin sources would be needed. However, the scope of the study does not extend out of the basin even though there appears to be sufficient water in the Sabine River basin to meet the entire projected deficit without the need to flood over 22,600 acres of wildlife and grazing habitat (Table 9). As an example, the firm yield of Toledo Bend is about 2,074,000 acre-ft/yr of which half is

available to Texas. Only about 2,250 acre-feet of this is presently committed (Albert Gray, Development Manager, Sabine River Authority, personal communication).

The environmental impact of diverting water from the Sabine Lake estuary does not, at this stage of planning, appear to be significant. The average gaged flow from the Sabine and Neches Rivers combined since 1941 is 11,173,000 acre-ft/yr. If 747,000 acre-ft/yr were exported from Toledo Bend away from the catchment of the estuary along with:

- 167,120 acre-ft/yr from Lake Tawakoni (80% of the firm yield),
- 126,210 acre-ft/yr from Lake Fork (70% of the firm yield),
- 115,452 acre-ft/yr from Lake Palestine (54% of the firm yield), and
- 709,800 acre-ft/yr from Rockland (entire _____proposed firm yield), 1,118,582 + 747,000 = 1,865,582

the balance of flow to the estuary would be approximately 9,300,000 acre-ft/yr. This is approximately 1.6 times as much water as the Texas Department of Water Resources (1981) has forecasted is needed to sustain the estuary with river flows. The most economically feasible diversion alternative is via an aqueduct at a pickup point on the Sabine River above Orange, Texas (BR 1985). This would facilitate instream use of the water by the fishery over much of the lower Sabine River.

The cost of alternative water sources is important. Water from lower Lake Creek would cost roughly $1.00 per 1,000 gal. water from Cleveland Lake would cost about $0.70 per 1,000 gal (BR 1984). Water from Toledo Bend would cost $0.33 per 1,000 gal for transportation and about $0.10 per 1,000 gal for procurement from the Sabine

River Authority for a total cost of $0.43 (BR 1985 and Albert Gray, pers. comm.)

There is clearly ample justification to include within the scope of this study the alternative of using existing sources of water out of the basin that would preclude the need to impact high quality wildlife habitat and the need to fund wildlife mitigation features as a part of reservoir development. We reiterate our comments to you dated July 24, 1984, on the preliminary findings of BR that, "No reservoir alternative will be environmentally acceptable to the FWS until this (an examination of out of basin water sources) is done."

January 1986

# PLANNING-AID REPORT
# FOR THE SAN JACINTO PROJECT
# MONTGOMERY AND SAN JACINTO COUNTIES, TEXAS

by

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for
U.S. Bureau of Reclamation
Southwest Region
Amarillo, Texas

D-49

APPENDIX D-AFFIDAVITS
Albert Gray
February 15, 1989

## EXECUTIVE SUMMARY

The Bureau of Reclamation is presently evaluating potential reservoir development in the San Jacinto River basin to meet a projected Houston area water deficit of as much as 747,000 acre-feet per year by 2030. This, the second planning-aid report on the San Jacinto Project, evaluates the fishery resources of Lake Creek and the West Fork of the San Jacinto River below Lake Creek using Instream Flow Incremental Methodology (IFIM). Wildlife resources were also evaluated for three reservoir alternatives (Figure 1) using Habitat Evaluation Procedures (HEP).

The West Fork has good water quality and provides support for most life stages of fish endemic to the stream. Lake Creek is a supporting tributary for the West Fork, particularly in providing spawning habitat.

A reservoir on Lake Creek would convert stream habitat to broadwater habitat and create a lake fishery that would be equivalent to that in Lake Conroe.

Wildlife habitat within the lands needed by the three reservoir alternatives consists primarily of pine and pine-hardwood forest with lesser amounts of bottomland forest, transitional forest, and areas cleared for pulpwood and pasture. The bottomlands have been classified as Resource Category 2 habitat; the rest as Resource Category 3 habitat. Habitat value in terms of habitat units is the least for the upper Lake Creek site and about the same for the lower Lake Creek and Cleveland sites. The latter should be dropped from further consideration due to the socioeconomic value of the habitat in supporting a national forest and the

endangered red-cockaded woodpecker as well as the wishes of San Jacinto County that the area not be flooded.

There is ample justification to consider out-of-basin water sources to meet the needs of the basin in lieu of habitat loss from a reservoir alternative. Toledo Bend Lake should be the primary target of the study.

If a reservoir alternative is selected, compensation should be directed at conserving bottomlands by protection against impending losses, improvement of existing bottomland habitat and the conversion of other types of habitat to bottomlands. There are several important management measures that can be carried out before impoundment to improve a reservoir for fish and wildlife including multi-level

outlets, selective clearing, public access, fish attracting structures and fencing.

Optimum flows for the West Fork were identified using IFIM. For most months these flows fell below the median flows in the stream. Flows to maintain spawning habitat associated with the stream are also needed in the April-June spawning months. Optimum flows for Lake Creek could not be identified because they consistently exceeded the limits of the analysis.

The Fish and Wildlife Service recommends that:

• out-of-basin water sources be investigated as thoroughly as in-basin sources to meet the short and long term requirements for water in the Houston metropolitan area, and the most economically, socially and environmentally acceptable alternative be selected;

• compensation for unavoidable losses from a reservoir alternative emphasize the conservation of mature or overmature bottomland forests by protection against impending losses, improvement of existing bottomland and the modification of other types of habitat;

• development of a reservoir include multi-level outlets, a clearing plan that considers the needs of fish and wildlife, public access, fish spawning structures and fencing; and

• instream flows recommended in Table 12 for the West Fork be included as criteria for detailed project planning along with a summer-fall flow of 10 cfs and a winter-spring flow of 30 cfs for Lake Creek below the reservoir.

**APPENDIX**

**AFFIDAVIT**

**STATE OF TEXAS §**
**§**
**COUNTY OF TRAVIS §**

BEFORE ME, the undersigned Notary Public, on this day personally appeared Charles E. Nemir, who being by me duly sworn on his oath deposed and said that the following statements are true:

"My name is Charles E. Nemir, and I am over 21 years of age, competent to make this affidavit, and personally acquainted with the facts herein stated.

"I am the Executive Director of the State Board of Registration of Professional Engineers. Prior to my employment with the State Board of Registration, I was Senior Engineer for Brown & Root USA for 1-1/2 years. At Brown & Root USA, I served as Manager for Water Resources Projects. Before my employment with Brown & Root USA,

I was Executive Director of the Texas Water Development Board for 1-1/2 years, Executive Director of the Texas Department of Water Resources (the predecessor agency of the Texas Water Commission) for 3-1/2 years, Deputy Director or Assistant Director of the Texas Department of Water Resources for 5-1/2 years, and Assistant Director of the Texas Water Development Board for 5 years.

"My educational background includes a Bachelor degree and Master's of Science degree in Engineering from the University of Texas at Austin. I have been a registered Professional Engineer in Texas since 1961, Number 20611.

"Based on my experience in the field of water resources management and development, I feel I am an expert and qualified to give my expert opinion.

"Part of my testimony is based on excerpts from the Texas Water Plan formally titled "Water for Texas: A Comprehensive Plan for the Future, Texas Department of Water Resources, November 1984," which is included in the Administrative Record in this case. As Executive Director of the Texas Department of Water Resources, I signed the Water Plan and was responsible for all phases of the Plan's development. I also moderated most of the public hearings held on the Plan. In addition, I have reviewed the report "Texas Bottomland Hardwood Preservation Program, Final Concept Plan," U.S. Fish and Wildlife Service, May 1985 (TBHPP).

"The TBHPP identifies 62 bottomland areas for consideration within the "area of ecological concern." The stated purpose of this program is to identify and seek

methods for preserving as much of the remaining bottomland habitat in east Texas as possible. Not all of these sites are recommended for preservation and other areas may be listed as further information becomes available. TBHPP at 4, 27. The program will utilize both easement and fee acquisition and in all instances the least interest acquired will be perpetual nondevelopment rights. TBHPP at 28. The protection priorities for individual sites will be based on several factors including threat to conversion of alternative uses. One of the alternative uses recognized as a threat to bottomland by the U.S. Fish and Wildlife Service was reservoir construction.

"Availability of water for beneficial use is critical to the well being of the state of Texas not only economically but for the

health and welfare of the state's residents. Consistent with legislative direction to develop the Water Plan, the Department of Water Resources identified sources of water supply, including groundwater, surface water, reuse of wastewater, water conservation, desalinization, and weather modification. While all of these sources have their place in Texas' future, the Department determined that development of surface water supplies has the most promise in continuing Texas' prosperity and health into the next century. Development of new reservoir sites are needed to meet the water needs of Texas because for the most part the water in existing reservoirs is either already in use or specifically committed to future use.

"My review of the Texas Water Plan, TBHPP, and the work done by Gordon Thorn, an engineer at the Texas Water Development Board, shows that 27 of the reservoir projects proposed in the Texas Water Plan would be potentially impacted by the TBHPP. Among the political subdivisions most immediately affected by the TBHPP are the Trinity River Authority, Sabine River Authority, North Texas Municipal Water District (NTMWD), Upper Neches Municipal Water Authority, Tarrant County Water Control and Improvement District Number One (TCWCID), Little Cypress Utility District, and the City of Dallas. Other political subdivisions which have reservoir sites threatened by the TBHPP include the Brazos River Authority, the Red River Authority and the City of Houston. Political subdivisions do not develop additional

water supplies in order to make a profit, rather they develop these supplies to meet their citizens or service areas' water needs. Their rates are fixed to recover costs, including debt service.

"The Texas Water Plan states that existing surface water supplies in the Trinity River basin are not sufficient to meet anticipated surface water needs in Zone 1. Texas Water Plan III-8-13. Zone 1 is commonly called the Upper Trinity basin. The major municipal water use in Zone 1 is in the Dallas/Fort Worth Metroplex area and the surrounding counties. The principle surface water suppliers in this area are Dallas, NTMWD, and TCWCID. The Trinity River Authority also supplies water to customers in this area, as well as being the entity responsible for the Trinity River Master Plan. The Sabine River

Authority owns reservoirs which either supply or will supply water to the Upper Trinity basin and is planning reservoirs to supply additional water to this area. The Little Cypress Utility District (LCUD) holds a state water permit to the Little Cypress Reservoir, but has not begun land acquisition. The Upper Neches Municipal Water Authority (UNMWA) holds a state water permit to Eastex reservoir. Both UNMWA's and LCUD's reservoirs are subject to the donation of conservation easements to the U.S. Fish and Wildlife Service by area landowners who will be impacted by these reservoirs. In the latest Brazos River Authority (BRA) Master Plan, BRA has two of its master plan reservoirs that are potentially impacted by the TBHPP: Millican and Caldwell. Millican reservoir would inundate bottomland hardwood sites

identified for preservation and Caldwell reservoir would potentially impact water levels in sites identified for preservation in the TBHPP. The reservoirs discussed in this affidavit are located and identified on the map as Attachment 1.

Dallas, North Texas Municipal Water District and Tarrant County Water Control and Improvement District No. 1

"Existing and under-construction surface-water storage and conveyance facilities available to the City of Dallas are sufficient to supply Dallas' water needs until the year 2020 when additional water will be needed. The proposed Carl Estes and Marvin Nichols, Stage 1, Reservoirs, in the Sabine and Sulphur River Basins, respectively, are alternative sources to meet these water demands through 2030. Texas Water Plan III-8-15. The City of

Dallas also is evaluating Parkhouse I, Parkhouse II, and Nichols II as other potential sources of water. The City of Dallas serves the Cities of Flower Mound, Lewisville, Coppell, Carrollton, Addison, Farmers Branch, Irving, Grand Prairie, Cockrell Hill, Duncanville, Cedar Hill, De Soto, Lancaster, Hutchins, Seagoville, and Balch Springs. Potential entities which may be served are the Cities of Wilmer, Glenn Heights, Park Cities, The Colony, Frisco, Argyle, Ponder, Bartonville, Krum, Prosper, Celina, Aubrey, Sanger, Pilot Point, Krugerville, Gunter, Tioga, Collinsville, Valley View, Gainsville, and Muenster.

"The NTMWD supplies water to Farmersville, Forney, Garland, Mesquite, McKinney, Plano, Princeton, Richardson, Rockwall, Royse City, Wylie, Allen,

Fairview, Frisco, Kaufman, Lucas, Murphy, Parker, Rowlett, Sachse, Sonnyvale, Dallas, Cash Water Supply Corporation (WSC), College Mound WSC, East Fork WSC, Forney Lake WSC, Gastonia-Scurry WSC, Lavon WSC, Milligan WSC, Mount Zion WSC, Nevada WSC, Rose Hill WSC, Seis Lagos WSC, and Wylie Northeast WSC. Projected water needs of the NTMWD service area will exceed existing supplies and those available from the proposed Red River Diversion and Cooper Reservoir between 2000 and 2010. George Parkhouse Reservoir, Stage I, in the Sulphur River Basin is proposed by the Texas Water Plan as a likely additional surface-water source to meet the NTMWD's needs through 2010. Texas Water Plan III-8-16. Additional shortages expected by 2020 can be met by constructing Stage II of George Parkhouse Reservoir before 2020.

Texas Water Plan III-8-16. Further water supplies will be needed by 2030 to meet projected additional growth in demand. A probable source of these supplies is the potential Marvin Nichols Reservoir, Stage I, in the Sulphur River Basin. Another source of surface water for the District is the potential Bonham (Corps of Engineers) project in Zone 3 of the Red River Basin. These sources could supply NTMWD's long-term needs of the District should the other proposed projects be infeasible.

"TCWCID supplies water to the cities of Fort Worth, Arlington and Mansfield, the Trinity River Authority of Texas (in the Tarrant County Water Supply Project), and municipal and industrial water users in Wise, Jack, Parker, Ellis, Johnson, Henderson, Kaufman, Navarro, and Freestone Counties. The District's municipal supply

customers in turn provide potable water to approximately one million people. The Texas Water Plan and the TCWCID's own studies project that the TCWCID service area's water needs will exceed existing supplies sometime around the year 2010. Texas Water Plan III-8-16. The Tehuacana Reservoir project, located on Tehuacana Creek, is expected to supplement TCWCID's water supply. By the year 2020, however, increases in municipal, manufacturing, and steam-electric power plant cooling water demands on system reservoirs will create a deficit. The Texas Water Plan has identified the proposed George Parkhouse, Stage II and Marvin Nichols, Stage I, Reservoirs in the Sulphur River Basin as additional sources to supply water. Texas Water Plan III-8-16. TCWCID has identified these reservoir sites, as well as Tennessee

Colony (Trinity Basin), Weches (Neches Basin), Ponta (Neches Basin), Black Cypress (Cypress Basin), George Parkhouse I (Sulphur Basin), and Marvin Nichols Stage II (Sulphur Basin).

"Some of these projects could be funded by the City of Dallas, TCWCID and NTMWD's systems together or in some combination since each of these systems could draw additional water supplies from these projects. Some of these projects also could be developed by each entity. TCWCID and the City of Dallas are currently investigating the institutional, engineering, and environmental aspects of many of these reservoir projects to determine the best alternative to and at what time each reservoir will be needed. It must be remembered that some of these reservoirs are alternatives to other

projects and some of these reservoirs are incompatible with each other, i.e., selection of one site will preclude development of another site. These reservoir sites are located throughout east Texas and throughout the federal defendants "area of ecological concern."

"These Reservoir sites can be used by the entities in the Upper Trinity basin because of the ability to construct conveyance systems. The City of Dallas and TCWCID already have constructed long pipelines from east Texas reservoirs to their service areas. TCWCID has a 74 mile and a 90 mile pipeline connecting Cedar Creek and Richland/Chambers reservoirs to Fort Worth and Tarrant County. The Richland/Chambers pipeline also can be used to transport water from Tehuacana Reservoir because TCWCID plans to physically connect the two

reservoirs. Dallas has a pipeline from Lake Tawakoni to its service area and is in the process of building a pipeline from Lake Fort to Lake Tawakoni. NTMWD is constructing a pipeline which together with the use of the bed and banks of Sister Grove Creek will transport water from Lake Texoma to Lake Lavon. NTMWD and the City of Irving also are in the process of planning for the construction of a pipeline from Copper Reservoir to Lake Lavon and Lake Lewisville.

Of course, there is a limit on how far water can be diverted without the cost being economically prohibitive. For example, cost studies have shown that it is infeasible to pump water from Toledo Bend to the Marshall, Longview and Shreveport, Louisiana area while it may be feasible to divert water from Toledo Bend Reservoir to

the City of Houston. Serving Houston from Toledo Bend is feasible in part because of the ability to use natural channels and gravity flow instead of pumps to move the water.

Trinity River Authority

"Trinity River Authority has prepared a master plan for the entire Trinity River Basin which identifies a number of potential reservoir projects in Zones 2 and 3 of the basin. In addition to Tennessee Colony and Tehuacana, the projects identified are Upper Keechi, Big Elkhart, Hurricane Bayou, Lower Keechi, Bedias, Nelson, Harman, Gail, Mustang, Caney, and Long King Reservoirs. A study of the potential Bedias Reservoir, in Madison, Grimes, and Walker Counties, is nearing completion by the Trinity River Authority and the U.S. Bureau of Reclamation to

determine its feasibility as a possible water supply for future municipal and industrial purposes;in the Houston and local areas. Texas Water Plan III-8-17.

"The Tennessee Colony Reservoir project is an authorized Corps of Engineers project needed for flood control now. The Texas Water Plan identifies Tennessee Colony as a potential source of water for downstream and adjacent basin water users. Texas Water Plan III-8-17. Trinity River Authority, TCWCID, and the City of Dallas also consider Tennessee Colony as a potential source of water for the Upper Trinity basin. Tennessee Colony's usefulness as an alternative water supply is currently questionable because of lignite deposits in the conservation pool. Texas Water Plan III-8-17.

Red River Basin

"In the Red River Basin, the Texas Water Plan identifies five potential major reservoir projects which are available for future use. Big Pine Lake is an authorized Corps of Engineers reservoir project located on Big Pine Creek in Red River and Lamar Counties which would provide flood protection along Big Pine Creek, water-supply storage for regional municipal and manufacturing purposes, recreation, and fishing and hunting. Bonham Reservoir would lie in Fannin County on Bois d' Arc Creek and is currently under study by NTMWD for use as an additional water supply. The Pecan Bayou Reservoir site is located on Pecan Bayou near Clarksville in Red River County. Liberty Hill dam site is located on Mud Creek near New Boston in Bowie County. Barkman Creek Reservoir is a

potential industrial water-supply project located in Bowie County near Texarkana. Big Pine Lake would inundate a site identified for preservation by the TBHPP. Pecan Bayou, Bonham, Barkman Creek, and Liberty Hill reservoirs could impact water levels of bottomland hardwood sites identified for preservation in the TBHPP.

Sulphur Basin

"In the Sulphur Basin, the Texas Water Plan recognizes that "major surface-water storage and conveyance facilities will be needed in the Sulphur River Basin to supply water to adjacent river basins, particularly the Trinity River Basin". Texas Water Plan III-3-8. The Texas Water Plan identifies NTMWD, City of Dallas, and TCWCID as the entities needing additional future water supplies from this basin. The Sulphur Basin has two potential major

reservoir sites both of which can be built in stages. George Parkhouse Reservoir, located downstream of Cooper Reservoir and Marvin C. Nichols Reservoir located downstream of Parkhouse. Texas Water Plan III-3-8.

"Stage One of Parkhouse Reservoir is proposed to meet NTMWD's water needs through 2010. The development of Stage II of George Parkhouse Reservoir on the North Sulphur River, in addition to waters provided by Cooper and Parkhouse Stage I Reservoirs could be used to meet the year 2020 needs in the Trinity River basin for the TCWCID and NTMWD. Texas Water Plan III-3-8.

"Cooper and Parkhouse Reservoirs could supply the increased water needs for NTMWD through the year 2030. However, TCWCID and the City of Dallas are projected to need

additional surface-water resources to meet water demands. Stage I of the Marvin C. Nichols Reservoir project downstream of Parkhouse Reservoir could provide this water supply. Both Parkhouse Stage I and Nichols Stage I would inundate portions of bottomland hardwoods identified for preservation under the TBHPP. Stage 2 of both reservoirs could additionally impact the water levels of the bottomland hardwood sites identified for preservation in the TBHPP.

Cypress Basin

"In the Cypress Creek basin, the Texas Water Plan recognizes that there are two reservoir sites available in the basin for development of additional water supplies, the Little Cypress Reservoir and the Black Cypress Reservoir. Texas Water Plan III-4-8. The Little Cypress Reservoir has

already been permitted by the Texas Water Commission by the Cities of Kilgore, Longview, Marshall and Harrison County. Black Cypress Reservoir is currently under consideration by the TCWCID as a potential source of additional water in its current long range planning study. Both of these reservoir sites would inundate bottomland hardwood areas that are identified for preservation in the TBHPP.

Sabine Basin

"In the Sabine basin, the Texas Water Plan recognizs that there are several reservoir sites which can be developed for either in-basin or out-of-basin water supply needs. Texas Water Plan III-5-11. These reservoirs are Big Sandy, Carl Estes, Prairie Creek, Carthage, and Bo.. Weir. The Sabine River Authority also has identified the Waters Bluff reservoir site as the most

promising source of additional water supply in the region. The Sabine River Authority and the Texas Water Plan have identified a need for additional water supplies in the Sabine Basin by the year 2030. The Texas Water Plan also states that the City of Dallas may need to look at Carl Estes as a potential source of water by the year 2020. Texas Water Plan III-5-11.

"Unfortunately most of these reservoir sites are potentially impacted by the TBHPP. The Waters Bluff project, of course, is effectively eliminated because of the acceptance of the Club easement into the refuge system. Big Sandy, Carl Estes, and Carthage would inundate portions of bottomland hardwood sites identified for preservation in the TBHPP. Bon Weir is located such that construction could impact the water levels in a bottomland hardwood

site identified in the plan. Prairie Creek is not impacted by the TBHPP but it is only a small reservoir located on a tributary stream which is identified in the Texas Water Plan to serve Longview. Texas Water Plan III-5-11.

Neches Basin

"There are three potential reservoir sites identified in the Texas Water Plan for Zone 1 of the Neches River Basin: Eastex, Weches and Ponta. Texas Water Plan III-6-9. Weches and Ponta have been identified as potential water supply alternatives for TCWCID, NTMWD, and the City of Dallas. Another reservoir site that is close enough to Zone 1 to be used in the Upper Trinity Basin is the Rockland Reservoir site. Texas Water Plan III-6-9. All of these reservoir sites are potentially impacted by the TBHPP.

Rockland, Weches and Ponta would inundate bottomland hardwood sites identified for preservation in the TBHPP. The construction of Eastex could impact water levels in a bottomland hardwood site identified for preservation in the TBHPP.

"As can be seen, the need for additional water supplies will occur in the Upper Trinity Basin first. Essentially all of the water supply sources in the Upper Trinity have been developed. Future water supplies must, therefore, come from reservoir sites farther to the east which have not been developed. Two sites exist in Zone 2 of the Trinity Basin, Tehuacana and Tennessee Colony, which are capable of serving Upper Trinity basin needs. The other sites that will have to be evaluated are even further east and located in the Red River Basin, Sulphur Basin, Cypress

Basin, and the Neches Basin. The few reservoir sites located west of the Dallas/Fort Worth area are needed for use in the river basin of their location. Most of these reservoirs also are not very large and do not produce a yield of water sufficient enough to justify their construction. Reservoirs located to the west of the Metroplex do not yield as much water as east Texas reservoirs because of smaller amounts of rainfall and greater rates of evaporation. For example, rainfall decreases from east to west across Texas at a rate of about one inch for every 15 miles. Similarly, net evaporation rates vary from nearly zero on the Sabine River in far east Texas to 100 inches per year near El Paso.

"Because of the Upper Trinity Basin's distance from these potential new water

sources and the increasingly lengthy permitting and environmental assessment process required for reservoir development, it will take many years to identify the best sites and build these reservoirs and conveyance facilities. Even before the passage of state and federal environmental laws, it often takes an average of twenty years to develop a reservoir project from the beginning of planning to completion of construction.

"The following chart indicates the problem that the TBHPP is causing to water supply planning for the Upper Trinity Basin:

Reservoir sites identified by the Texas Water Plan, regional or local plans as the potential sources of additional water supply for the Upper Trinity Basin:

| | Will inundate land identified for preservation by the TBHPP | Will impact land identified for preservation by the TBHPP |
|---|---|---|
| 1) | Tehuacana (Trinity Basin) (TCWCID) | X |
| 2) | Tennessee Colony (Trinity Basin) (TCWCID, Dallas, TRA) | X |
| 3) | Weches (Neches Basin) (TCWCID) | X |
| 4) | Ponta (Neches Basin) (TCWCID) | X |
| 5) | Black Cypress (Cypress Basin) (TCWCID) | X |
| 6) | George Parkhouse I (Sulphur Basin) (Dallas, NTMWD, TCWCID) | X |
| 7) | George Parkhouse II (Sulphur Basin) (Dallas, NTMWD, TCWCID) | X |
| 8) | Marvin Nichols I (Sulphur Basin) (Dallas, NTMWD, TCWCID) | X |
| 9) | Marvin Nichols II (Sulphur Basin) (TCWCID, Dallas) | X |
| 10) | Carl Estes (Sabine Basin) (Dallas) | X |
| 11) | Waters Bluff (Sabine Basin) (Dallas) | X |

12) Rockland (Neches Basin) (Upper Trinity Users) X

13) Bonham Red River Basin) (NTMWD) X

"The TBHPP makes it virtually impossible to plan for future water needs since there is a great deal of uncertainty over whether a project can be built. Admittedly, there were uncertainties before the TBHPP in water development planning. These types of uncertainties, however, could be addressed in the planning process. Consider that when evaluating reservoir site suitability, an engineer evaluates among other things, the topography, geology, evaporation rate, water availability, construction costs, and land acquisition costs to determine whether the reservoir will hold water, how much water it will hold and how much the reservoir will cost. The engineer also must evaluate the cost of the conveyance

facilities to the area of water use. Preliminary environmental studies are done to evaluate whether there are any insurmountable environmental problems such as endangered or threatened plants or animals and what mitigation requirements might be expected. Other costs are estimated including land acquisition for both reservoir and mitigation land, engineering, legal, and operation and maintenance. Each alternative site in the study is then compared against the other sites to come up with the most economical alternatives. It can be assumed with a reasonable degree of certainty that if a reservoir site is suitable from a water availability standpoint, has no site geology problems, and has no unmitigatable environmental problems, the reservoir will be permitted by the Texas Water Commission

and the Corps of Engineers. Since the entities building reservoirs by necessity must have the power of eminent domain, it is also a reasonable assumption that the land for the reservoir can be acquired. If the land underlying the reservoir contains natural resources such as lignite, the cost to acquire the land and the resources are estimated and if the cost of the project is high enough another site may be selected if an alternative exists.

"With the TBHPP, there can be no certainty that a reservoir site will be available when needed because until all of the permits are issued and the land for the reservoir acquired, the landowners impacted by the reservoir could donate a conservation easement to the refuge program and stop the project. If very many of the reservoir sites which have been identified

as being needed by the Upper Trinity Basin water users are conflicted by Fish and Wildlife's acceptance of conservation easements or their equivalent into the refuge system, the citizens of the Upper Trinity Basin may be in danger of not having enough water to meet their needs.

"The reason that the Upper Trinity water users, as well as other users, may be in danger of losing their future water supplies as a result of the TBHPP is that because of climate, topography, existing reservoir development, water availability, and soil conditions, there are only a limited number of reservoir sites in Texas. Reservoirs are needed, even in east Texas, because of the Texas rainfall/drought cycle which requires water to be held in storage for use when there is a demand for it but no flowing water in the stream or river.

The scarcity of reservoir sites and the number of entities that need the water in the few remaining major reservoir sites make it likely that if certain sites such as the Waters Bluff site are eliminated by the TBHPP, there will be conflicts between various entities over the remaining sites. Besides preventing an orderly development of the state's water resources, this conflict may cause reservoirs to be developed in areas which are environmentally more sensitive, may cause the development of a larger number of lower yielding reservoirs which would disrupt a larger amount of land than development of a fewer number of larger reservoirs, and will cause some entities to end up without enough water to meet their needs. It must be remembered that the reservoirs that are listed in the Water Plan which are not in

conflict with alternative reservoirs will eventually be developed. Many are even projected to be needed by the year 2030 which was the planning horizon that was picked for the Texas Water Plan.

"The TBHPP needs to be evaluated under NEPA. To not do so will jeopardize decades of planning costing millions of dollars that has been performed by the U.S. Study Commission-Texas, the Corps of Engineers (on Millican, Carl Estes, Big Pine, and Bonham reservoirs) the Bureau of Reclamation (on Big Sandy and Bedias reservoirs) the State of Texas, and the river authorities, water districts and cities of Texas. The 1984 Water Plan cost the Texas Department of Water Resources in the range of 7 to 10 million dollars over a period of three years. This does not count the money that was spent in planning in

previous state water plans or the planning that was done by the U.S. Study Commission-Texas, the Corps of Engineers, the Bureau of Reclamation, and the river authorities, water districts and cities which plans were relied upon by the Department of Water Resources in their work.

"If the Fish and Wildlife Service had complied with NEPA prior to issuance of the TBHPP, the state water planners would have been able to identify which sites the Fish & Wildlife Services intends to accept into the refuge system and which sites would not be accepted. Furthermore, the Fish and Wildlife Service would have had to state the position it intends to take on upstream reservoir development and the maintenance of flows through sites accepted into the refuge program downstream of that development. The answers to these issues

would allow Texas water resource planning to proceed. Additionally, the Fish and Wildlife Service, in complying with NEPA, would have had to balance the need for bottomland hardwoods versus the need for human water supply. The Fish and Wildlife Service would also have had to consider alternatives to preempting too many of Texas' few remaining reservoir sites.

There are several alternatives available to preempting 27 Texas' reservoir sites which would supply over 70% of the State's future water supply. One alternative is protection of bottomland in conjunction with reservoir mitigation. In order to receive a permit to construct a reservoir today, the Corps of Engineers and the Texas Water Commission requires mitigation of the land that will be impacted by the construction of the reservoir. For

example, the Corps of Engineers required Colorado Municipal Water District to acquire approximately 4000 acres for its Stacy reservoir. No bottomland was required because there was no bottomland impacted. The Corps of Engineers also recommends that the San Antonio Water Board acquire 1748 acres of which 1319 acres is to be riparian land (bottomland). The Texas Water Commission required the City of Stephenville, Glen Rose, and Somervell County to acquire 1700 acres of land of which at least 600 acres had to be bottomland hardwoods for their Paluxy reservoir. The Texas Water Commission also required the LCUD to acquire 12,000 acres of land at least 10,000 of which must be bottomland hardwoods for its Little Cypress Reservoir.

"Another alternative could be the enhancement of the Category 5 lands or the other Categories of bottomlands to make the land provide for more wildlife. This is a proven technique and the habitat gains are ascertainable using the Fish and Wildlife Services' own computer model the Habitat Evaluation Procedure (HEP). This model allows the user to evaluate property which is to be acquired to see how much available habitat there is for various species (including ducks) and to see how much gain in habitat can be accomplished through enhancement techniques such as planting food crops, providing nesting boxes, planting trees, building greentree reservoirs and so on. The HEP model is used by the Corps of Engineers, the Texas Water Commission, the Texas Water Development Board, the Fish and Wildlife

Service, the Texas Parks and Wildlife Department, and water resource developers to estimate the habitat impacts of reservoirs and the land and management requirements to mitigate the reservoirs impact. Both of these alternative can be used together or in conjunction with other methods to balance the need for bottomland hardwoods and the need for water supply for humans.

"The environmental analysis on bottomland hardwood preservation cannot be done piecemeal. The TBHPP itself identifies that the Program's goal is to preserve as much of the bottomland hardwoods as possible in the "area of concern." This "area of concern" includes the same area that the Upper Trinity basin and others are planning to use for their future water supply. Just as the reservoir sites are

related to one another so are the bottomland hardwood sites. This programmatic or comprehensive study should be done in coordination with the federal, state, regional and local water planning entities, as well as the equivalent environmental groups. Any less of a participation by the various groups would not allow the Fish and Wildlife Service to make a reasoned and objective environmental analysis.

"it is my opinion that the TBHPP will be used by landowners and environmental groups to block reservoir projects by transferring into the refuge system land which will be inundated by the construction of a reservoir. Bottomland Hardwood sites accepted into the easement program downstream of a reservoir also could prevent reservoir development if the Fish

and Wildlife Service refused to allow changes to the natural flow through the refuge. In my opinion, the Fish and Wildlife Service's actions in accepting the Little Sandy Hunting and Fishing Club easement without regard of the importance of that site as a water supply and the cumulative effect of losing that site as a water supply establishes a dangerous precedent which will severely impair future reservoir development."

/s/
Charles E. Nemir

SWORN TO AND SUBSCRIBED before me on the 16th day of February, 1989.

/s/ Kenneth R. Wood
Notary Public in and for
The State of Texas

(Name--Typed or Printed)

(SEAL)

Date Commission Expires:

**APPENDIX D**

**AFFIDAVIT**

**STATE OF TEXAS §**
**§**
**COUNTY OF TRAVIS §**

BEFORE ME, the undersigned Notary Public, on this day personally appeared Gordon L. Thorn, Jr., who being by me duly sworn on his oath deposed and said that the following statements are true:

"My name is Gordon L. Thorn, Jr., and I am over 21 years of age, competent to make this affidavit, and personally acquainted with the facts herein stated.

"I am Head of the Surface Water Data Collection and Studies Unit in the Water Availability Section of the Texas Water Development Board.

"I have worked at the Texas Water Development Board for 16 years and my experience in the field of water resource

analysis, water basin modelling, and water supply allocation may be characterized as follows: I currently supervise the collection of surface water data and the performance of surface water studies. In the past, I have worked on computer models of water systems, water rights and surface water availability modelling, and bays and estuary modelling.

"My educational background includes a bachelor's and master's degree in engineering from the University of Texas at Austin. I am a Professional Engineer in the State of Texas No. 33873.

"Based on my experience in the field of water resources planning, I feel I am an expert and qualified to give my expert opinion.

"Part of my testimony is based on excerpts from "Waters for Texas: A

Comprehensive Plan for the Future, Texas Department of Water Resources, November 1984," which is included in the Administrative Record of this case. "Water for Texas" is also an official record of the Texas Water Development Board (hereinafter the "Board").

"Section 16.051 of the Texas Water Code directs the Executive Administrator of the Texas Water Development Board to prepare and maintain a comprehensive state water plan for the orderly development and management of the state's water resources in order that sufficient water will be available at a reasonable cost to further the economic development of the entire state. In addition, the Board is directed to amend and modify the plan in response to experience and changed conditions.

"The amended Texas Water Plan was adopted by the Texas Water Development Board on September 20, 1984, as the official water plan for the State of Texas. This amended water plan has been in preparation since 1981 and is the result of a planning process which included public input through 13 public meetings, interviews with community and professional leaders, a public opinion poll, and 9 public hearings.

"Volume 1 of the amended Texas Water Plan is an executive summary which sets forth planned actions and policy recommendations. Volume 2 is a technical document which provides details of current water development and use, projected future water supply and wastewater treatment needs, and potentially developable water supplies to meet future water needs in each river and coastal basin of the state.

"The planned actions and policy recommendations approved by the Board include actions to be taken by the Texas Department of Water Resources, now the Texas Water Development Board and the Texas Water Commission, and recommendations to local, state, and federal entities, and the Texas Legislature to: (1) implement actions and programs intended to address the problem of inadequate long-term water supplies in certain areas of the state, (2) increase attentions to flood protections and floodplain management at the state and local level, (3) maintain strong state involvement in protecting water quality, and (4) address problems associated with the increasing strain being placed upon local entities to cope with water supply, water quality protection,

water conservation, flood protection, and other water-related needs.

"In examining water needs for the state, the Board uses a fifty-year planning horizon. In the current water plan this planning horizon is the period from 1980 to 2030. Texas has 15 river basins and 8 coastal basins which are designated as separate planning areas for the purposes of calculating the in-basin water supplies and the fifty-year foreseeable future in-basin water requirements. Because of the wide range of hydrologic conditions and water uses within Texas river and coastal basins, each basin has been divided into areas or zones to facilitate the presentation of data and planning.

"As stated in "Water for Texas", about 64 percent of the dependable yield of Texas reservoirs is being used to meet current

needs; the remainder is committed to expanding municipal and industrial needs during the next 20 to 30 years in areas which can be served by these supplies. These uncommitted supplies, however, will not meet the projected future needs within their respective areas, with a few exceptions, and cannot meet all future needs in neighboring and more distant locations.

"Past and present planning efforts have identified approximately 65 potential major reservoir project sites. Of this total, 19 are authorized federal projects and 46 are planned state/local projects. It is estimated in "Water for Texas" that about 5.3 million acre-feet per year of additional dependable surface-water yield and capturable treated sewage return flows (4.3 million acre-feet of yield and 1.0

million acre-feet of capturable return flows) could be developed with construction of all 65 potential reservoir projects.

"The projected High and Low Series water demands and the projected water supplies in each of eight major geographic regions of the state are shown and discussed in "Water for Texas." Localized shortages and surplus supplies occur within each region, and these are discussed in more detail in Volume 2-WATER FOR TEXAS: Technical Appendix.

"Surface-water development needs were determined for each area by comparing estimates of the currently-available supplies of ground and surface water with projected future water needs given by the High Series projections. Areas identified as having projected future shortages were examined to determine if available water

resources in the local area could be used to meet the shortage. Where locally-available supplies were determined to be insufficient, more distant sources that are projected to be surplus to the future 50-year needs of the river basins in which such sources are located, were identified as potential supplies to offset these shortages. In addition to those projects determined to be needed by this allocation of water supplies to projected demands, other specific projects were identified which could be selected based upon the plans of local interests. Where local interests have indicated prior to the publication of "Water for Texas" that they would develop alternative projects, those projects are included in the proposed surface-water development plan. Projects

such as Waters Bluff are incorporated in accordance with agency guidelines.

"The surface-water allocation procedure described above resulted in the scheduling of 44 of the 65 potential major reservoir projects over the period 1990 through 2030. Many of the projects projected for construction and operation by 1990 will not likely be operational by that time; however, based on the projected water needs given by the High Series projections, these projects or their equivalent alternatives will be needed should a repetition of teh critical drought of historical record occur. The timing of construction of facilities could be delayed if population growth, growth in the economy, an dthe effects of water conservation follow more closely the Low Series estimates of future water demands. For projects scheduled

after the year 2000, this delay could be 10 to 15 years. A copy of this schedule is located in Volume 1 - WATER FOR TEXAS: A Comprehensive Plan for the Future, p. 39, Administrative Record H (Texas Water Plan).

"In spite of the additional major reservoirs proposed for the 1980-2030 period, some areas of the state are projected to have significant water shortages within the next 50 years.

"I have reviewed the report 'Texas Bottomland Hardwood Preservation Program, Final Concept Plan', U. S. Fish and Wildlife Service, May 1985. This report identifies 62 areas of buttonland hardwoods in East Texas for possible preservation as waterfowl habitat. I compared these 62 areas with the potential major reservoir sites identified in 'Water for Texas, Technical Appendix', Texas Department of

Water Resources, November 1984. As a result of that comparison, I have determined that 27 of the reservoir projects proposed in 'Water for Texas' for development to meet future water-supply needs would potentially be impacted by the acquisition of the bottomland hardwood sites by the U. S. Fish and Wildlife Service as described in the 'Final Concept Plan.' Attachment 1 is a list of those 27 reservoirs.

"Of the reservoirs listed as primary projects needed for water supply by year 2030, Cooper, Parkhouse 1, Nichols 1, Big Sandy, Carl Estes, Rockland, Tehuacana, and Wallisville would inundate portions of bottomland hardwood sites identified for preservation in the Final Concept Plan. Parkhouse II, Bon Weir, and Caldwell are located eihter just upstream of or close

enough to bottomland hardwood sites that construciton of these projects could potentially impact the water levels in these bottomland hardwood sites; i.e., streamflows through these sites and periodic inundation of these sites.

"Big Pine, Little Cypress, Weches, Tennessee Colony, and Millican are projects identified in 'Water for Texas' as alternatives which could be needed for water-supply purposes by year 2030 which, if constructed, would inundate bottomland hardwood sites identified for preservation in the Final Concept Plan. Other projects proposed as alternatives which could impact water levels in bottomland hardwood sites are Liberty Hill, Eastex, and Bedias.

"Of the reservoirs proposed in 'Water for Texas' as other potential water-supply projects which could be needed for

construction by year 2030, Black Cypress, Carthage, Ponta, and Navasota would inundate bottomland hardwood sites identified for preservation in the Final Concept Plan. The remaining reservoirs, Bonham Corps of Engineers, Pecan Bayou, Barkman Creek, and Hurricane Bayou could, if constructed, have an impact on the water levels in bottomland hardwood sites.

"Several developments have occurred since the preparation of 'Water for Texas' which affect some of these reservoirs. In 1984, the injunction on construction of Cooper was lifted and construction of the reservoir by the U. S. Army Corps of Engineers was resumed in 1985. According to information provided to me by staff of one of the local sponsors of this project, the North Texas Municipal Water District,

all lands necessary for construction of the project have been acquired.

"Due to problems with mineral deposits, the development of Carl Estes and Carthage Reservoirs have been deferred.

"In addition, local sponsors of two projects proposed as alternatives for development by year 2030, Little Cypress and Eastex, have received Texas Water Commission permits for construction. At this time, construction has not been initiated on either project."

/S/ Gordon L. Thorn, Jr.
AFFIANT

**STATE OF TEXAS §**

**COUNTY OF TRAVIS §**

Subscribed to and sworn before me by Gordon L. Thorn, Jr., on this 31st day of October 1988, to certify which witness my official hand and seal of office.

/S/ Carolyn Ahrens
Notary Public in and for the
State of Texas

CAROLYN AHRENS
Typed or Printed Name of
Notary Public

My Commission Expires: 6/17/90

**ATTACHMENT 1**

Texas Water Plan Reservoirs Potentially Impacted by Implementation of the Bottomland Hardwood Preservation Program of the U. S. Fish and Wildlife Service as Described in the "Final Concept Plan", May 1985

| Basin | Primary Projects Needed for Water Supply by 2030 | Alternative Projects to be Constructed by 2030 | Other Potential Water Supply Projects |
|---|---|---|---|
| Red | None | Big Pine<br>Liberty Hill | Bonham C. of E.*<br>Pecan Bayou<br>Barkman Creek |
| Sulphur | Cooper<br>Parkhouse I<br>Parkhouse II<br>Nichols I | None | None |

| | | | |
|---|---|---|---|
| Cypress | None | Little Cypress | Black Cypress |
| Sabine | Big Sandy<br>Carl Estes<br>Bon Weir | None | Carthage |
| Neches | Rockland | Weches<br>Eastex | Ponta |
| Trinity | Tehuacna<br>Wallis-ville | Tennessee Colony<br>Bedias | Hurrican Bayou |
| Brazos | Caldwell | Millican | Navasota |

*C. of E. is U. S. Army Corps of Engineers

**APPENDIX D**

INTERROGATORY 1

SABINE RIVER AUTHORITY

V.

UNITED STATES DEPARTMENT OF THE INTERIOR,

ET AL.

FEDERAL DEFENDANTS' RESPONSE

TO PLAINTIFF'S FIRST INTERROGATORIES

TO THE HONORABLE JUDGE OF SAID COURT:

COME NOW the Federal Defendants and submit the following responses to Plaintiff's first interrogatories.

Interrogatory No. 10:

Identify all Federal, state, regional, and local governmental agencies or associations known to you which were opposed to your acquisition of the easement from the Club.

Response:

a. Federal Agencies known to be opposed to the easement:

1) U.S. Bureau of Reclamation, Department of the Interior

2) U.S. Army Corps of Engineers

b. State agencies/entities opposed to the easement:

1) Texas Water Commission

2) Texas Water Development Board

3) Sabine River Authority

4) Trinity River Authority

5) Brazos River Authority

6) Guadalupe-Blanco River Authority

c. Local agencies/entities opposed to easement:

1) Little Cypress Municipal Utility District

2) Several other local water districts

3) City of Longview

4) City of Kilgore

5) City of Gladewater

6) City of Hawkins

Interrogatory No. 12:

Describe, in as much detail as possible, the basis for your determination as to the need for, and feasibility of, Waters Bluff Reservoir and identify the person or persons performing the analysis of its necessity and feasibility for the Fish and Wildlife Service (FWS).

Response:

The initial arguments by SRA for Waters Bluff hinged on the contention that two potential projects in the Sabine Basin, Carl Estes and Carthage, are not presently feasible because of lignite coal deposits within the former and because of oil and gas and lignite activity within the boundary of the latter. However, lignite mining has occurred in the area for many years. To date, the only potential site of lignite activity in the area is the potential Yantis Project (a lignite

gasification plant and mine site in Hopkins, Woods, and Rains Counties) proposed by Phillips Coal (SRA, 1985-Update of the Master Plan). Since other coal gasification projects in east Texas and elsewhere have fallen on hard times, it would be most unlikely if this project is presently viable. It is not known if any of the proposed Carl Estes Site would be mined even if this project is implemented. Regarding the Carthage Reservoir site, three existing lignite mines are present near the area (Darco, Pirkey, and Martin Lake). Only one other potential site in the area is under consideration (the Karnack Power Plant in Harrison County). None of these projects would be affected except the Darco Mine which has been in existence since 1932.

We believe it is questionable whether Waters Bluff is needed even without these

two reservoirs. Eleven major reservoirs are located in the upper Sabine River Basin and one major reservoir, Toledo Bend, extends to the edge of the upper basin. Two authorized Federal projects (Carl Estes and Big Sandy) and two potential local projects (Carthage and Prairie Creek) are listed in the 1984 Texas Master Plan as proposed projects in the upper basin. In addition, eight major reservoirs exist in the Cypress Basin just to the north of the Sabine Basin. Two potential local projects (Little Cypress and Black Cypress) are proposed in the Cypress Basin. The Cypress Basin is mentioned because the various local entities in the Cypress Basin are planning water projects that are competing for the same customers that SRA is proposing to serve with Waters Bluff. Even if the Cypress projects are ignored as potential sources of water to the Sabine

Basin, the 1984 Texas Water Plan projects that sufficient surface water supplies will exist in the upper basin until 2030 if Big Sandy, Prairie Creek, and Carl Estes Reservoirs are constructed and water from Toledo Bend Reservoir is allocated to the Marshall area. The Water Plan states that the Corps of Engineers has estimated that lignite resources within the Carl Estes Site "could be mined by 2020 thereby allowing construction of the project before 2020." (sic - 2030). The Carthage Reservoir was not projected to be needed before 2030. The Texas Water Plan states that water needs in the Cypress Basin can be met until 2030 by existing sources except in the Marshall area where the proposed Big Sandy Reservoir and water from the existing Toledo Bend Reservoir will supply the additional needs. Little Cypress is listed as an "alternate

additional surface-water supply" and presently is in the planning and hearing stage. Little Cypress (if built) will service several cities in the Sabine Basin. Black Cypress is not projected as being needed by 2030. Major unallocated water supplies are present in several existing reservoirs, including Toledo Bend.

The analysis of the necessity and feasibility of the Waters Bluff Project was performed by Jim Neal, Bruce Halstead, Jana Nelson and David Curtis of FWS.

Interrogatory No. 26:

Identify all other tracts of land located in Texas, of which you are actively pursuing as part of the Texas Bottomland Hardwood Preservation Program.

Response:

Other bottomland hardwood areas in which the FWS has an interest in preserving are identified in the May 1984, Texas

Bottomland Hardwood Preservation Program Concept Plan.

Interrogatory No. 30

Describe any negotiations between the Federal Defendants and the Club concerning public access to the property covered by the easement.

Response:

The Club was clearly opposed to including public access in the easement document. This is common in cases involving conservation easements. The only discussion of public access which may have occurred would have been at the October 31, 1985 meeting. Since the Club was not interested in donating the right to public access, there was no negotiation.

**APPENDIX D**

INTERROGATORY 2

SABINE RIVER AUTHORITY

V.

UNITED STATES DEPARTMENT OF THE INTERIOR, ET AL.

FEDERAL DEFENDANTS' RESPONSE

TO PLAINTIFF'S SECOND INTERROGATORIES

TO THE HONORABLE JUDGE OF SAID COURT:

COME NOW the Federal Defendants and submit the following responses to Plaintiff's second interrogatories.

Interrogatory No. 12:

Clarify your response to Interrogatory No. 26 of Plaintiff's First Set of Interrogatories by describing, in as much detail as possible, whether or not it is the intent of the FWS to actively pursue other tracts of land identified in the May 1984, Texas Bottomland Hardwood Preservation Program Concept Plan. What

specific actions to date has the FWS taken to pursue the acquisition of additional tracts of land identified in the May 1984, Texas Bottomland Hardwood Preservation Program Concept Plan?

Response:

The Service does intend to pursue further acquisition of lands included in the 1984 (1985) concept plan. We are presently working with other landowners who have requested anonymity. Actions taken with these willing sellers involve biological evaluations and appraisals, including timber cruises.

Interrogatory No. 15:

Clarify your response to Interrogatory No. 36 of Plaintiff's First Set of Interrogatories by describing the specific basis and authority by title, section number, paragraph number or page number, as appropriate for the international

obligations accruing to the U.S. Fish and Wildlife Service (Service) contained in the North American Waterfowl Plan, Migratory Bird Treaty Act, the Migratory Bird Conservation Act, as well as your assertion that failure to accept the Club's donation of the easement would constitute a failure to meet the Service's international obligations. Of the 250,000 acres of bottomlands in eastern Texas and southeastern Oklahoma identified in your response, describe what actions the Service has taken to meet this commitment.

Response:

The Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711; 40 Stat. 755), as amended, implemented the 1916 Convention between the United States and Great Britain (for Canada) for the protection of migratory birds, thereby establishing a Federal responsibility for protection of the

international migratory bird resource. Amendments in 1936 implemented the 1936 Convention between the United States and the United Mexican States. Public Law 93-300 (88 Stat. 190) implemented the 1973 Convention between the United States and the Government of Japan for the protection of migratory birds. Public Law 95-616 (92 Stat. 3110) in 1978 authorized the Secretary of the Interior to issue regulations to implement the Convention between the United States and the Union of Soviet Socialist Republics concerning the Convention of Migratory Birds and their environment. Under these Conventions, the United States has an international obligation to protect the migratory bird source.

The Migratory Bird Conservation Act (16 U.S.C. 715-715d, 715e, 715f-715r; 45 Stat. 1222), as amended, establishes a Migratory

Bird Conservation Commission to approve areas recommended by the Secretary of the Interior for acquisition with Migratory Bird Conservation Funds. Those acquisitions are for the protection of migratory birds, and are, therefore, in support of the United States obligation under the Migratory Bird Treaty Act.

The North American Waterfowl Management Plan was signed by Canada and the United States in 1986. This plan outlines requirements for waterfowl management in the United States and Canada, describes populations and habitat goals, and recommends actions to resolve problems of international concern. Formal discussions are how under way with Mexico. This plan is in support of the international obligations under the Migratory Bird Treaty Act.

In reference to the 250,000 acres identified for protection in eastern Texas and southeastern Oklahoma, the Service has acquired approximately 5,000 acres of bottomland hardwoods in Oklahoma, and accepted the easement on the Little Sandy Hunting & Fishing Club. We are presently studying the acquisition of two other bottomland hardwood areas of approximately 18,000 acres total in eastern Texas in addition to the two above-mentioned acquisitions.

Interrogatory No. 18:

Identify any Environmental Assessments or Environmental Impact Statements prepared pursuant to the National Environmental Policy Act (NEPA) in connection with the document which you have referred to as the May 1984, Texas Bottomland Hardwood Preservation Program (Concept Plan).

Response:

The May 1984 (actually May, 1985) Concept Plan is not an action document in itself, but rather a planning document. As such, no NEPA involvement is appropriate. Each of the bottom-land hardwood sites included in the document will be examined under NEPA if acquisition is proposed.

To date, only the Little Sandy project has been examined under the NEPA guidelines.

Interrogatory No. 26:

Justify the conservation easements offered to FWS, nationally, in the last ten years and identify for each (1) the date of the offer, (2) the date of the final FWS decision whether to accept the easement, (3) whether the easement offer was accepted, (4) whether it was offered and/or acquired as part of the Bottomland Hardwood Preservation Program, (5) the statute or

other legal basis pursuant to which the acquisition was or would have been made, (6) whether the easement, if acquired, became part of the National Wildlife Refuge System, (7) the purpose of the acquisition, if the easement was acquired, (8) the FWS region involved, (9) the state and county wherein the easement was or is located, (10) the owner(s) who offered the easement, (11) the number of acres involved in the easement, (12) the price paid for the easement, if it was acquired, (13) the duration of the easement, and (14) whether public access was or is permitted on the easement.

Response:

We object on the basis of the onerous and burdensome and irrelevant nature of the request. Over the last 10 years, the U.S. Fish and Wildlife Service has taken hundreds of easements nationwide. It would

require a massive review of files of easements taken over the past 10 years. Realty staff in six regions would have to examine every easement taken to respond to this request. For these reasons, we object.

**APPENDIX D**

INTERROGATORY 3

SABINE RIVER AUTHORITY

V.

UNITED STATES DEPARTMENT OF THE INTERIOR, ET AL.

FEDERAL DEFENDANTS' SUPPLEMENTAL RESPONSE TO PLAINTIFF'S SECOND INTERROGATORIES

TO THE HONORABLE JUDGE OF SAID COURT:

COME NOW the Federal Defendants and submit the following supplemental responses to Plaintiff's second interrogatories.

Interrogatory No. 12:

Clarify your response to Interrogatory No. 26 of Plaintiff's First Set of Interrogatories by describing, in as much detail as possible, whether or not it is the intent of the FWS to actively pursue other tracts of land identified in the May 1984, Texas Bottomland Hardwood

Preservation Program Concept Plan. What specific actions to date has the FWS taken to pursue the acquisition of additional tracts of land identified in the May 1984, Texas Bottomland Hardwood Preservation Program Concept Plan.

Response:

The Federal Defendants incorporate their previous answer to Interrogatory No. 12 and would supplemental that answer with the following information. There are four landowners with whom the FWS have talked about acquisition. These four landowners are:

1. Temple-Eastex, who owns bottomland hardwood habitat in Anderson and Cherokee Counties on the Neches River;
2. Adjoining their property is land owned by Champion International, a timber company. Their land is

interspersed with Temple-Eastex land. The Trust for Public Land, a private, non-profit conservation organization is actually dealing with Champion International. The FWS is not presently a party to those discussions between the Trust for Public Land and Champion International;

3. The FWS has had informal contact with the Blount Estate on the Angelina River in Nacogdoches County;

4. The FWS has had informal contact with the Anderson Development Corporation Lands in Smith County, Texas, on the Sabine River. The Anderson lands lie adjacent to the Little Sandy Hunting and Fishing Club.



APPENDIX D-INTERROGATORY 3
Excerpt from Federal Defendants' Supplemental Response to Plaintiff's Second Interrogatories

APPENDIX D

**United States Department of the Interior**
Bureau of Reclamation
Southwest Region
Commerce Building, 714 S. Tyler, Suite 201
Amarillo, Texas 79101-2386

Sep 29 1986

Memorandum

To: Regional Director, Fish and Wildlife Service Albuquerque, New Mexico

From: Regional Director

Subject: Comments on the Draft Environmental Assessment and Decision Document, Proposed Land Protection, Little Sandy Hunting and Fishing Club Easement

While we did not receive the Draft Environmental Assessment and Decision Document, Proposed Land Protection, Little Sandy Hunting and Fishing Club Easement, from your office, we nevertheless feel compelled to provide comments. This

project could have serious adverse effects on the ability of the Sabine River Authority to meet the future water needs of the people within the region. The precedent set by this maneuver would be used by anti-water development groups nationwide to preempt, or at least make very difficult, future water development projects.

Section VII, Consultation and Coordination, on page 37 does not include the Sabine River Authority, Texas Water Development Board, Corps of Engineers, Bureau of Reclamation, or any of the local city and county officials. Since this nondevelopment easement could adversely impact upon these agencies and organizations, they should have been included. The Bureau has a planning study underway in the immediate area, the Texas

Big Sandy Project (TBSP). The Bureau has, for several years, coordinated the TBSP with the Fish and Wildlife Service (FWS). However, the Bureau was not aware of FWS negotiations for the easement with the Little Sandy Hunting and Fishing Club (LSHFC) until receipt of this draft environmental assessment, which, as stated earlier, did not come to us from your office. The Waters Bluff Reservoir (WBR) is one of the alternative sites we are considering in the Texas Big Sandy Project. The Sabine River Authority's March 1986 Master Plan included the WBR. Construction of the WBR would require the acquisition of the LSHFC property. Page iii of the summary and pages 9 and 34 briefly reference and dismiss the WBR. A typical statement is the one on page iii of the summary. It reads as follows:

Acquisition of an easement on the Little Sandy Hunting and Fishing Club by the FWS could affect potential water development projects in the area. However, it is difficult at this time to state definitively what the exact affect might be, since proposals for water developments are in the early planning stages.

Purposes of the WBR could include a dependable water supply to meet future area needs, flood control, hydropower, stream flow regulation, recreation, and fish and wildlife enhancement. A waterfowl management area could be developed in the upper end of WBR and made a part of the National Wildlife Refuge System.

This inclusion of the nondevelopment easement on LSHFC private property into the FWS' refuge system could irreversibly block

the construction of WBR and its associated multipurpose public benefits.

Page 34 of the draft assessment states:

> The donation of an easement on the Little Sandy Club by the FWS will affect future water development activities in the area. Any land or interest in land in the NWR System such as this proposed easement cannot be removed from refuge status without a special Act of Congress authorizing the flooding of the Little Sandy Club property.

Part 1508.7 of the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, under which this assessment has been prepared, states:

"Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individual minor but collectively significant actions taking place over a period of time.

We feel that, since WBR is included in the Sabine River Authority's Master Plan and since it has been included as an alternative in the Bureau's Texas Big Sandy Project, this reservoir meets the definition of "reasonably foreseeable future action." Therefore, we feel that WBR should be made an integral part of the LSHFC assessment.

It seems unusual for the Federal Government to enter into an agreement which allows the private owners to maintain all exclusive rights and privileges and excludes the public.

As stated earlier, the construction of WBR would result in the acquisition of the private LSHFC property and placing it in public ownership. The only apparent benefit of the nondevelopment easement to the LSHFC appears to be that this perpetual easement would block the acquisition of the property by the WBR project and assure that their land would stay in private ownership by being protected by the FWS. The timing of this easement and the incorporation of WBR into the Sabine River Authority's Master Plan and the inclusion of the WBR as an alternative in the Bureau's Texas Big

Sandy Project appears to be more than coincidental.

Page II, Section II, Alternatives, identifies only two alternatives. A third alternative might be to develop one or more waterfowl refuges in conjunction with Big Sandy Reservoir and WBR. Section 4 of the Fish and Wildlife Coordination Act provides for lands which have value to the National Migratory Bird Management Program to be made available without cost to the state fish and wildlife agency or the FWS. This would allow the FWS to meet its mandate under the Migratory Bird Conservation Act of 1929 (page i of the summary).

The development of one or more refuges could provide increased improved and managed habitat for wintering mallards, breeding wood ducks, threatened American alligator, and endangered bald eagle (page

i of the summary). These refuges could also provide increased public access for bird watching and waterfowl hunting.

It is likely that more bottomland hardwoods would be acquired and placed in public ownership than presently exists on the 3,802 acres of LSHFC private lands.

There is also another "No Action" alternative. This "No Action" alternative would be to build WBR and place LSHFC private property in public ownership and develop a waterfowl refuge in the upper end of WBR. Page II, Section II.A, No Action, states:

> Under the "No Action" alternative, the DOI would not pursue protection of the proposed area. The area was purchased and has been managed primarily for its value for hunting and fishing and will continue to be secure at least

temporarily without the proposed action. However, changing circumstances (i.e., increased taxes, feasibility of economic development, change in club membership, the need for additional capital that could be obtained by logging the bottomlands, or impact of outside development/land use-changes) will probably result in loss of this land as wildlife habitat in the future. Under this alterative it is anticipated that the area covered by the proposed easement would eventually be lost.

We do not understand how the nondevelopment will stop all of these outside and inside forces from impacting upon the LSHFC.

In summary, it would seem that a dangerous precedent would be established

whereby Federal (public) funds have been, and will continue to be, expended for primarily private interest. While it can be theorized that the general public will benefit by preservation of diminishing natural habitat, we question who will benefit most--private interests or the public.

The potential impacts associated with the preclusion of future development, including water resources, have not been evaluated. As with wildlife resources habitat, suitable sites for water development projects are becoming limited. Therefore, we oppose this action until a more definitive evaluation of the future tradeoffs has been made. Inasmuch as the loss of the area as wildlife habitat is not imminent, it would appear prudent that no action be taken until water development

plans are completed. In this manner, full evaluation of the potential impacts of the proposal, as well as those of development plans, could be made. Additionally, it would also seem that there are other methods whereby the hunt club could control its own destiny without involving Federal funds and oversight, if preempting the water development project is not the primary purpose.

/s/

cc: Commissioner, Attention: 150, 700
(w/copy incoming)

Texas Representative, Austin, Texas (w/o copy)

APPENDIX D

DEPARTMENT OF THE ARMY
SOUTHWESTERN DIVISION, CORPS OF ENGINEERS
1114 COMMERCE STREET
DALLAS, TEXAS 75242

October 24, 1986

Reply to
Attention of
Planning Division

Mr. Michael Spear
Regional Director
Fish and Wildlife Service
U.S. Department of the Interior
Post Office Box 1306
Albuquerque, New Mexico 87103

Dear Mike [Mr. Spear],

After its existence was brought to our attention, we acquired a copy of the Draft Environmental Assessment and Decision Document for proposed land protection of the Little Sandy Hunting and Fishing Club. The action described and its implications concern us.

It appears to us that the action is proposed by the hunting club primarily to

protect the property from being affected by the reservoir project proposed by the Sabine River Authority and/or the Bureau of Reclamation. If this action is successful, it would likely become a precedent for other similar groups, potentially delaying and making more expensive the development of water resource development projects needed by the nation.

The Assessment notes that the water resource project might be affected, yet the Bureau of Reclamation and the Corps of Engineers, the primary agencies charged with developing these projects, were not included in your agency's coordination of this action. We consider this omission a serious oversight.

To allow for a complete review and analysis of the proposed action, we request that you furnish this office with 10 copies

of the report and hold the comment period open for 45 days after our receipt.

Sincerely,

/s/

J.B. Hilmes
Major General, U.S. Army
Division Engineer

APPENDIX D

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT CORPS OF ENGINEERS
P.O. BOX 17300
FORT WORTH, TEXAS 76102-0300

NOVEMBER 7, 1986

Reply to
Attention of:
Planning Division

Mr. Michael Spear
Regional Director, Region 2
U.S. Fish and Wildlife Service
Post Office Box 1306
Albuquerque, New Mexico 87103-1306

Dear Mr. Spear:

This letter is in regard to the Draft Environmental Assessment and Decision Document, Proposed Land Protection, Little Sandy Hunting and Fishing Club Easement, prepared by your office in July 1986. On October 27, 1986, members of my staff attended a public meeting at Tyler, Texas, and requested an extension to the comment period on this document. Subsequent

contact with ~~your~~ office indicated no action had been taken on my request.

I am forwarding the enclosed comments to ensure that the Fort Worth District's concerns are considered in this matter. I regret that coordination with the Corps of Engineers did not occur early in your planning process. Copies of the Drat EA were not received in the District until after we were informed of its existence by the Bureau of Reclamation and the Sabine River Authority.

Sincerely,

/s/

Robert E. Keenan
Lieutenant Colonel, CE
Acting District Engineer

Enclosure

APPENDIX D

Comments on the Draft Environmental Assesment [sic] and Decision Document, Proposed Land Protection, Little Sandy Hunting and Fishing Club Easement.

1. The Draft Environmental Assessment (EA) contends that without the proposed action the land in the Little Sandy Hunting and Fishing Club (LSHFC), approximately 3,800 acres, would eventually be lost to development. This contention is not supported by any detailed studies of land use and economics. As the LSHFC has owned the property for almost 100 years without even harvesting timber, it would appear unlikely that the land use would change.

2. The last paragraph on page 33 states, "Donation to FWS of an easement . . . will essentially prohibit any significant

change in land use for perpetuity. This will result in a negative impact to the local economy, since the area will not be available for development." The assumption that the land would be developed in the future is not supported by any studies.

3. Section VII, Consultation and Coordination, page 37, states that contact was made with, "Federal entities include [sic] the U.S. Forest Service and SCS." The Corps of Engineers never received a copy of the document or any of the accompanying notices of public meeting. Potential exists for this action to adversely affect water development projects nationwide. A thorough examination of all environmental, social, and economic impacts should be undertaken. This examination should include a full and open discussion with all affected Federal, State, and local

agencies and individuals. In consideration of the far reaching implications of this proposal dn the considerable interest expressed at the Public Meeting on October 27, 1986, the Fort Worth District recommends the preparation and circulation of an Environmental Impact Statement.

4. Section VIII, List of Preparers, reveals only one individual was involved in the EA. The National Environmental Policy Act, Section 102 states " . . . (2) all agencies of the Federal Government shall - (A) Utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and decisionmaking which may have an impact on man's environment". Use of a single individual to prepare this document and limited coordination with other Federal,

State, and local agencies appears to fail to comply with this portion of the Act.



APPENDIX D-INTERROGATORY 3
Excerpt from Federal Defendants' Supplemental Response to Plaintiff's Second Interrogatories